

Abstract of the master thesis

Title: Modeling of risk aversion

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Abstract: The thesis discusses various theories that are able to model investor's subjective attitude to risk. The goal of the thesis is to clearly recapitulate possible mathematical approaches and to apply them in a real situation. One of the ways to tackle the problem is to use expected utility theory and a specific shape of a utility function. Another way is to choose a suitable risk measure. Especially useful for the modelling of risk aversion is the class of spectral risk measures that enables investor to choose a risk spectrum that meets his perception of risk. The thesis contains basic definitions concerning stochastic programming – a theory essential to solve the related optimization problems.

Keywords: Risk aversion, utility function, probability constraint.